

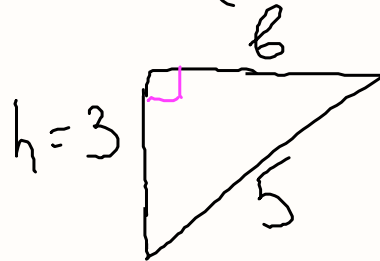
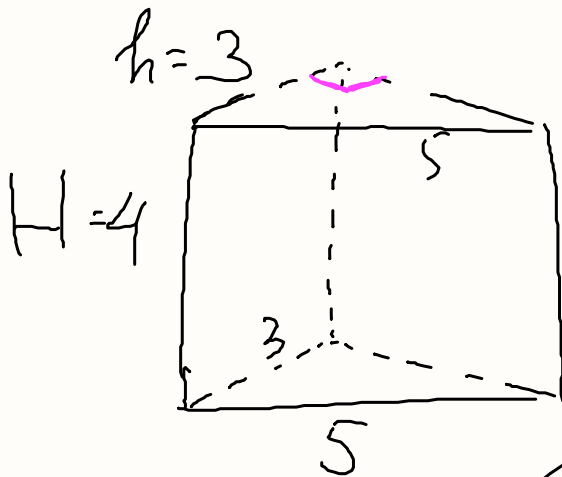
OBJECTIVES : FIND VOLUMES
OF PRISMS AND CYLINDERS
CH. 10.2 P. 514 -

VOLUME IS EQUAL TO THE
PRODUCT OF AREA OF THE BASE
AND HEIGHT. (RIGHT OR OBLIQUE)

VOLUME MEASURE [CUBIC UNITS]
 m^3 cm^3 ft^3

p. 517 #2

$$V = (\text{AREA OF THE BASE})H$$



$$A_{\Delta} = \frac{b \cdot h}{2}$$

$$b = \sqrt{5^2 - 3^2} \therefore$$

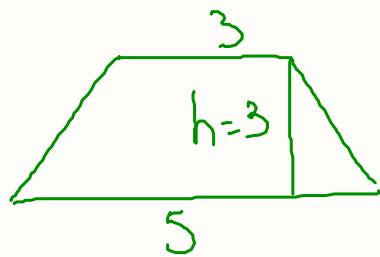
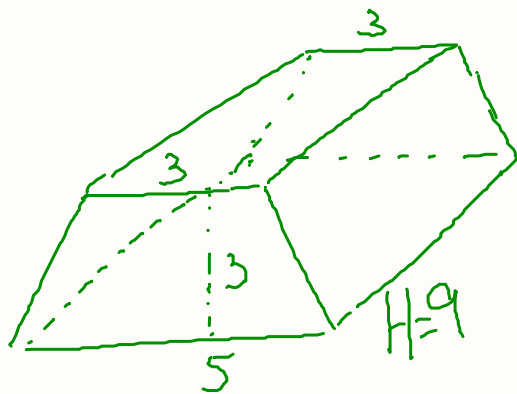
$$= \sqrt{25 - 9} =$$

$$= \sqrt{16} = 4$$

$$\begin{aligned} V &= A_{\Delta} \cdot H = \\ &= 6 \cdot 4 = 24 \text{ units}^3 \end{aligned}$$

$$A_{\Delta} = \frac{4 \cdot 3}{2} = 6$$

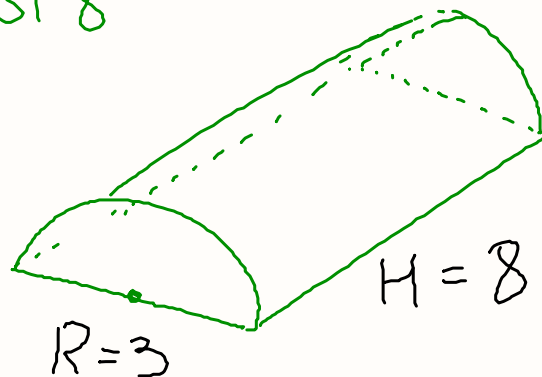
p.517 # 3



$$\begin{aligned} A_{\text{BASE}} &= \frac{(a+b)}{2} \cdot h = \\ &= \frac{(5+3)}{2} \cdot 3 = \\ &= 12 \end{aligned}$$

$$\begin{aligned} V &= A_{\text{BASE}} \cdot H = 12 \cdot 9 = \\ &= 108 \text{ units}^3 \end{aligned}$$

#5 p. 518



$$V = \pi R^2 h = \pi \cdot 3^2 \cdot 8 = \pi \cdot 9 \cdot 8 = 72\pi$$

$$V_{\frac{1}{2}} = \frac{72\pi}{2} = 36\pi \text{ cubic units}$$

CLASSWORK #7 p. 518
RIGHT TRIANGULAR PRISM

$$A = \frac{b \cdot h}{2}$$

7a, b

$$V = A \cdot H$$

HOME p. 578

7d, 7g, 7j.